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|   | Docket Number (Optional): |                |  |
|---|---------------------------|----------------|--|
| PRE-APPEAL BRIEF REQUEST FOR REVIEW   | 4541-016/RSW920030282US1  |                |  |
| I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Mail Stop AF. Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)] | Application Number:       | Filed:         |  |
|   | 10/814,551                | March 31, 2004 |  |
| Date: May 7, 2008   | First Named Inventor:     |                |  |
|   | Guido                     |                |  |
| Signature: /Edward H. Green, III/   |                           |                |  |
|   | Art Unit:                 | Examiner:      |  |
| Typed or printed name: EDWARD H. GREEN, III   | 2176                      | HENRY ORR      |  |
| Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.  |                           |                |  |
| This request is being filed with a notice of appeal.  |                           |                |  |
| The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided.   |                           |                |  |
| I am the  |                           | ,              |  |
| applicant/inventor  | Edward M. Leen &          |                |  |
|   | Signatu                   | re             |  |
| assignee of record of the entire interest.  | Edward H. Green, III      |                |  |
| See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)   | Typed or Printe           | ed Name        |  |
| attorney or agent of record   |                           |                |  |
| Registration Number: 42,604   | (919) 854-1844            |                |  |
| _   | Telephone N               | lumber         |  |
| attorney or agent acting under 37 CFR 1.34.   |                           |                |  |
| Registration Number if acting under 37 CFR 1.34   | May 7, 20                 | 008            |  |
|   |                           |                |  |
| NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.   |                           |                |  |
| *Total of 2 form(s) is/are submitted  |                           |                |  |

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## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

| Guido, et ai.  | )<br>PATENT PENDING   |
|--|---|
| Serial No.: 10/814,551<br>Filed: March 31, 2004  | ) Examiner: Henry Orr   |
| For: Affinity Group Window Management<br>System and Method                             | ) Group Art Unit: 2176  |
| Docket No: <b>4541-016</b>   | Confirmation No.: 7434  |
| Mail Stop AF<br>Commissioner for Patents<br>P.O. Box 1450<br>Alexandria, VA 22313-1450 | CERTIFICATE OF MAILING OR TRANSMISSION [37 CFR 1.8(a)] I hereby certify that this correspondence is being:  ☐ deposited with the United States Postal Service on the date shown below with sufficient postage as first dass mail in an envelope addressed to: Mail Stop AF, Commissioner for Paretar E.O. Roy 1456, Alexandria VA 27313-1450. |

## NOTICE OF APPEAL AND PRE-APPEAL BRIEF

May 7, 2008

Date Edwar

This correspondence is being:

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☐ transmitted by facsimile on the date shown below to the United States Patent and Trademark Office at (571) 273-8300.

Edward H. Green. III

In response to the Advisory Action mailed March 17, 2008, Applicants appeal from the rejection of claims 1-28. Applicants request a Pre-Appeal Brief Review. Payment of the appropriate fee for the Notice of Appeal accompanies this response. If additional fees are required, please charge them to Deposit Account No. 18-1167.

## PRE-APPEAL BRIEF

The present invention is related to user-specified grouping of windows in a Graphical User Interface (GUI), and altering the z-order of windows in the group together. For example, claim 1 recites "establishing, by a user, a first affinity group comprising a subset of two or more but less than all of said plurality of windows in said GUI environment, said first affinity group including windows associated with at least two different, independent applications, such that the windows comprising said first affinity group are related," and "raising a z-order of windows in said first affinity group above other windows in said GUI environment when any one window in said first affinity group is selected." As an example, the specification describes, at ¶ 0014, and with reference to Figure 2, a window 40 associated with a word processor application, a window 38 associated with an e-mail client, and a window 36 associated with a web browser. The user may define an affinity group comprising the windows 36, 38, 40. Thereafter, whenever one of the windows 36, 38, 40 is selected, all three windows 36, 38, 40 rise to the top of the GUI desktop (i.e., they overlie, or obscure, all other windows). The applications are different in that they are not the same application, and are independent in that they are not functionally related. Both limitations are expressly recited in claims 1, 14, 19 and 25.

In the Final Office Action mailed February 7, 2008, the Examiner maintained the rejection of claims 1, 14, 19, and 25 under 35 U.S.C. § 103 as being unpatentable over U.S. Patent No. 5,995,103 to Ashe ("Ashe") in combination with U.S. Patent Number 5,920,313 to Diedrichsen et al. ("Diedrichsen"). Neither Ashe nor Diedrichsen, separately or in combination, teach or suggest grouping GUI windows associated with different and independent applications, and simultaneously altering the z-order of all windows in the group with respect to other GUI windows, when one is selected.

Ashe discloses a window grouping mechanism for manipulating and displaying groups of windows, all of which are associated with the same application program, via a series of linked data structures. "For example, a drawing application may define a document window into which a user 'draws' images as well as floating or palette windows which contain tools, such as pencil, color, etc., for drawing those images." col. 1, lines 48-51. Ashe discloses that a user may select only a subset of the palette windows to rise to the top of the desktop when the document window is selected, rather than all the palette windows the application has spawned, which may clutter the desktop. col. 3, lines 30-37. Ashe fails to teach or suggest an affinity group of GUI windows, and manipulating the z-order of the group, where the windows are associated with at least two different applications. Rather, Ashe discloses grouping and z-order manipulating only windows spawned by a single application. Ashe accomplishes this by creating a linked data structure containing an entry for each window the application creates. Ashe includes group identification information in these data entries, indicating the group(s) with which each window is associated. col. 3, lines 37-45.

In the Background discussion, Ashe introduces the concept of z-ordering by describing window layer priority classes. In particular, a screensaver having a priority class of 2 will always overlie a window having a priority class of 3, such as a word processing application, a spreadsheet application, and the like. Ashe notes that the applications having priority class 3 can overlie each other in z-order. The Examiner conflates this background discussion of z-ordering with a teaching of grouping different applications (those having a priority class of 3) for z-ordering. This argument fails for at least two reasons.

First, Ashe discloses that <u>all</u> application windows have a priority class of 3 – as opposed to a screen saver having priority class 2 – and that the applications will overlie each other in z-order. This is precisely the problem Applicants' invention solves. Indeed, claim 1 recites, "raising a z-order of windows in said first affinity group <u>above other windows in said GUI environment</u> when any one window in said first affinity group is selected." Ashe does not teach or suggest such action, but in fact teaches against it by describing <u>all</u> applications having a priority class

of 3, wherein <u>all</u> applications will be overlaid in z-order by a screen saver having a priority class of 2. A "group" comprising <u>all</u> application windows is a trivial exercise of the concept of grouping, and does not meet the claimed limitation of altering the z-order of a group of application widows with respect to other windows in the GUI environment.

Second, claim 1 expressly recites, "establishing, by a user, a first affinity group comprising a subset of two or more but less than all of said plurality of windows in said GUI environment." A "group" comprising all application windows does not meet the limitation of a group of two or more but less than all application windows in a GUI environment.

Ashe teaches user-defined grouping of a subset of windows spawned by, and associated with, a single application, for the purpose of simultaneous z-order manipulation of windows in the group. This does not meet either of the claimed limitations of grouping windows associated with <u>different</u> and <u>independent</u> applications, as recited in claims 1, 14, 19, and 25. Nor does Ashe's background discussion of z-order teach grouping less than all application windows for z-order manipulation with respect to other GUI windows.

Diedrichsen discloses grouping together various child windows – those spawned by an application running in a parent window – together with the parent to form a logical group, col. 5, line 61 – col. 6, line 4. Windows in the group are identified by, e.g., highlighting the parent window in high intensity and the child windows with a reduced intensity. col. 6, lines 17-34. "Thus, in a system according to the present invention, the user can always tell which objects are related to the selected window, even if there are more instances of the same application running." col. 6, lines 40-44. By its express terms, Diedrichsen does not disclose grouping windows for simultaneous z-order manipulation that are associated with independent applications – only applications that "are related to the selected window" as parent/child. This is clear by examining the mechanism by which Diedrichsen forms and maintains the groups, which is described with reference to Figs. 7A and 7B.

Fig. 7A depicts the overall process: select an object (710); highlight it (715); and call related objects (720). Fig. 7B depicts the details of step 720. If the selected object is a parent and there are one or more child objects associated with it (740), iterate through all child objects (745, 750). On the other hand, if the selected object is a child and there is a parent associated with it (755), access its parent (760) and iterate through the parent's other child objects (765), to highlight (or otherwise mark) the group. Diedrichsen is able to iterate through these parent/child associations by pointers (created when child objects are spawned) that associate them. See Fig. 6, and col. 8, lines 22-33.

[T]he parent window always knows about any child window it creates, and hence it can call methods on those windows to visually mark them on the display, in order to differentiate the groups of <u>related</u> user interface objects on the desktop; particularly, <u>the parent window can call methods on its</u> child windows to change the color of the window as required.

col. 8, lines 34-40. Diedrichsen discloses <u>no other mechanism</u> for grouping windows. In particular, Diedrichsen discloses no mechanism by which <u>different and independent</u> applications running in different windows may be associated by a user (or in any other way) to form affinity groups of windows for simultaneous z-order manipulation on a GUI desktop.

The Examiner disputes this assertion, with citation to col. 1, lines 63-65. The full paragraph states.

Many applications make use of several user interface objects, typically windows and icons, that are related logically. Such objects are often <u>child objects</u> of a main or parent window object. Different applications can also be organized into groups of applications, <u>each of which are related by</u> function.

By any reading, this paragraph discloses grouping only related applications, not independent applications as recited in Applicants' claims. The Examiner is correct that the term "independent" is not defined in Applicants' specification. Accordingly, the term must be interpreted as it would by one of ordinary skill in the art. As indicated by numerous definitions in the MacGraw-Hill Dictionary of Scientific and Technical Terms. 5<sup>th</sup> Ed., 1994, in the technical

arts, "independent" generally denotes "unrelated to," "not dependent on," or "having independent functionality." See, e.g., independent axioms (one cannot be deduced as a theorem from the others); independent equations (no one is satisfied by a solution to the rest); independent events (probability of one occurring does not affect the probability of the other); independent functions (knowledge of values obtained by all but one insufficient to solve remaining one). Applicants submit that one of ordinary skill in the computing arts would interpret "independent" applications to mean applications that are not functionally related (e.g., as parent/child).

In the Advisory Action, the Examiner stated, "the Examiner interprets the scope of the term 'independent' to have broader coverage than 'unrelated by function'. For example, as stated above, when one instance of an application is closed, the other instance of the same application stays open exemplifies multiple 'independent' application instances." (emphasis added) While two copies of the same application may be independent under such an interpretation, they manifestly cannot be different applications. Claims 1, 14, 19, and 25 recite grouping windows associated with applications that are both different and independent, for simultaneous z-order manipulation. Diedrichsen discloses only simultaneous z-order manipulation of windows associated with related applications, such as parent/child (which are not independent), or as multiple instances of the same application (which are not different, even if deemed independent).

Neither Ashe nor Diedrichsen, separately or in combination, fairly teach or suggest grouping two or more but less than all windows in a GUI environment, the windows associated with different, independent applications, for simultaneous z-order manipulation of the windows in the group with respect to all other windows in the GUI environment. Accordingly, the § 103 rejections of claims 1, 14, 19, and 24, and all claims depending therefrom, must be reversed.

Respectfully submitted,

COATS & BENNETT, P.L.L.C.

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Dated: May 7, 2008

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